EXHIBIT B

US 7,844,882 B2

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3. The system of claim **1**, wherein the determining is based on a latency requirement.

4. The system of claim **1**, wherein the determining is based on a bit error rate requirement.

5. A system for allocating shared memory comprising:

means for transmitting or receiving, by a transceiver, a message during initialization specifying a maximum number of bytes of memory that are available to be allocated to a deinterleaver;

means for determining, at the transceiver, an amount of memory required by the deinterleaver to deinterleave a first plurality of Reed Solomon (RS) coded data bytes within a shared memory;

means for allocating, in the transceiver, a first number of bytes of the shared memory to the deinterleaver to deinterleave a first plurality of Reed Solomon (RS) coded data bytes for transmission at a first data rate, wherein the allocated memory for the deinterleaver does not exceed the maximum number of bytes specified in the message;

means for allocating, in the transceiver, a second number of bytes of the shared memory to an interleaver to interleave a second plurality of RS coded data bytes received at a second data rate; and

means for deinterleaving the first plurality of RS coded data bytes within the shared memory allocated to the deinterleaver and interleaving the second plurality of RS coded data bytes within the shred memory allocated to the interleaver, wherein the shared memory allocated to the deinterleaver is used at the same time as the shared memory allocated to the interleaver.

6. The system of claim **5**, wherein the determining is based on an impulse noise protection requirement.

7. The system of claim **5**, wherein the determining is based on a latency requirement.

8. The system of claim **5**, wherein the determining is based on a bit error rate requirement.

9. A system that allocates shared memory comprising:

a transceiver that performs:

transmitting or receiving a message during initialization specifying a maximum number of bytes of memory that are available to be allocated to an interleaver;

determining an amount of memory required by the interleaver to interleave a first plurality of Reed Solomon (RS) coded data bytes within a shared memory;

allocating a first number of bytes of the shared memory to the interleaver to interleave the first plurality of Reed Solomon (RS) coded data bytes for transmission at a first data rate, wherein the allocated memory for

the interleaver does not exceed the maximum number of bytes specified in the message;

allocating a second number of bytes of the shared memory to a deinterleaver to deinterleave a second plurality of RS coded data bytes received at a second data rate; and

interleaving the first plurality of RS coded data bytes within the shared memory allocated to the interleaver and deinterleaving the second plurality of RS coded data bytes within the shared memory allocated to the deinterleaver, wherein the shared memory allocated to the interleaver is used at the same time as the shared memory allocated to the deinterleaver.

10. The system of claim **9** wherein the determining is based on an impulse noise protection requirement.

11. The system of claim **9**, wherein the determining is based on a latency requirement.

12. The system of claim **9**, wherein the determining is based on a bit error rate requirement.

13. A system that allocates shared memory comprising:

a transceiver that performs:

transmitting or receiving a message during initialization specifying a maximum number of bytes of memory that are available to be allocated to a deinterleaver;

determining an amount of memory required by the deinterleaver to deinterleave a first plurality of Reed Solomon (RS) coded data bytes within a shared memory;

allocating a first number of bytes of the shared memory to the deinterleaver to deinterleave a first plurality of Reed Solomon (RS) coded data bytes for transmission at a first data rate, wherein the allocated memory for the deinterleaver does not exceed the maximum number of bytes specified in the message;

allocating a second number of bytes of the shared memory to an interleaver to interleave a second plurality of RS coded data bytes received at a second data rate; and

deinterleaving the first plurality of RS coded data bytes within the shared memory allocated to the deinterleaver and interleaving the second plurality of RS coded data bytes within the shred memory allocated to the interleaver, wherein the shared memory allocated to the deinterleaver is used at the same time as the shared memory allocated to the interleaver.

14. The system of claim **13**, wherein the determining is based on an impulse noise protection requirement.

15. The system of claim **13**, wherein the determining is based on a latency requirement.

16. The system of claim **13**, wherein the determining is based on a bit error rate requirement.

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